

Date: March 13, 2003  
Applicant: Alberto Alvarez Calderon  
Serial No: 09/677 583 Group: Art Unit 3617  
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For: Multimission Transonic Hull and Hydrofield Attorney Docket 1186-001

SUPPLEMENTARY AMENDMENT

Applicant appreciates interview granted by Examiner on March 6, 2003. It is summarized below.

1. DVD DEMONSTRATES SUCCESSFUL TRANSONIC HULL MODEL TESTS:

During the interview, applicant showed a DVD of 24-minute length summarizing several years of privately funded research, development and model tests of Transonic Hulls (TH). The DVD covered four parts:

Part I Tow tank tests of a 6 foot model

Part II Tests of electric powered remote control TH surface model of 4 feet length. Tests were in a pond, and in beach surf. The tests in surf also showed a model of a conventional patrol boat of the same size and weight, for comparison. The TH model showed more favorable stability and control characteristics in surf with much less disturbances in pitch, surge, yaw, and sway. It also exhibited a stronger upright tendency, and a self righting tendency in the presence of large diagonal and cross seas.

Part III Tests of a 6 foot remote control TH surface model powered by an internal combustion engine. These tests were in a pond, in the bay with chop, and across the large wake of the manned chase boat.

Part IV Tests of a three foot remote control TH surface-subsurface model showing surface and subsurface operation in a pond and in beach surf.

1.1 Remarks on Part I: Tank tests of a 6 ft. model

The stills of tow tank tests in the DVD clearly showed the hydrofield and rays of the first TH patent, which phenomena were also confirmed in the subsequent tests of the powered TH models.